October 05, 2000

T.R. "Ty" Gillis GAI Consultants-Southeast, Inc. 4845 West Irlo Bronson Highway Kissimmee, Florida 34746 Virgil E. Rook P.E. Smith & Company, Inc. 2989 Vineland Road Kissimmee, Florida 34746

RE: SR 530 (US 192) from 500 Feet West of Bonnet Creek to East of SR 535

Osceola County

FPIN No. 239670 1 52 01, 239670 1 52 02, 239670 1 56 01

239670 1 56 02 & 239670 1 56 03

WPI 5115727

Contract No. 20,208

Subject: Issue No. 1 - Waterline "Pigging"

Dear Sirs:

The Owner, Florida Department of Transportation (Department), requested a hearing to determine <u>entitlement</u> of Smith & Company, Inc. (Smith) to additional compensation and contract time for the "pigging" requirements on the above referenced project. Should entitlement be established, the Dispute Review Board (Board) was not to decide the quantum of such entitlement at this time, as the parties would attempt to negotiate the value of entitlement.

Pertinent issues, correspondence and other information relating to the Department's and the Contractor's positions were forwarded to this Board for review and discussion at the hearing that was held on September 19, 2000.

ISSUE:

Does the Contract require the Contractor to "pig" the 600 mm water line?

DEPARTMENT'S POSITION:

"On behalf of the owner and the owners' representative we are presenting to the Dispute Review Board our full position papers pertaining to the contractors claim issue #1. This is the issue dealing with the pigging of the 600 mm water main. This claim has two topics, the first is the entitlement and the second is time for the work.

The offer made by the FDOT previously in the attempt to settle this dispute has been withdrawn. For this reason we are asking for the Boards recommendations and assistance in settling both issues after the completion of the hearing. We understand that the decision of the board is not binding, but will offer great guidance in an attempt to settle both issues that are involved. The board's recommendation will weigh greatly, and we hope that both parties can accept the board's decision and that this issue will be closed.

The position that the owner is taking on the first topic is that no entitlement is due. The position the owner is taking for the second topic is that no days should be granted.

ISSUE #1: Entitlement

In an attempt to settle the issue, a meeting was set up between the utility owner (COK), owner's representative (GAI-SE/FDOT), and the contractor (SCI) (page 20). The FDOT resident engineer

requested that the contractor submit a cost breakdown for the extra work and that the price would be reviewed to see if it is acceptable (page 25). The contractor submitted their cost breakdown for the extra work in pigging the 600 mm water main (page 31). The contractor revised their cost breakdown once they realized the actual cost for the field office overhead (page 35). The City of Kissimmee stated that it is the contractor's responsibility to pig the line as it is stated in the technical special provisions the City of Kissimmee stated that there are several methods of pigging the line with butterfly valves in place and would not specify ways or mean to the Contractor (page 25). The City of Kissimmee would not provide additional compensation for the pigging of the water main (page 13). The FDOT felt that the contractor was due some entitlement since pigging normally does not involve butterfly valves. The FDOT's resident engineer made an offer (page 35) based on the contractors calculations less the money for the field office overhead. This offer was verbally rejected since the contractor wanted the additional days and the money for the field office overhead. The contractor's claim is being denied therefore a summary of both parties' positions and offer/request was filed (page 38). The original offer was again presented to and denied by the contractor (page 39). The issue is still unresolved, and the FDOT has withdrawn their offer as stated in the Dispute Review Board meeting held on June 29, 2000. Now the owner and the owners' representative will present the issue to the DRB and await their recommendation.

ISSUE #2: Time

The contractor has requested that 12 additional contract days and compensation for the field office overhead be granted for the additional work. This was included in their original cost breakdown and their revised cost breakdown (page 31 and 35). The owner and their representative have denied this request since the 600 mm water main has not been a controlling item of work nor has it been on the contractor's critical path (page 39). Even in the owners offers to settle the issue of pigging the line, the compensation was based on the contractor's calculations for the manpower and equipment only. The issue is unresolved, and the owner and the owners' representative will present the issue to the DRB and await their recommendation."

CONTRACTOR'S POSITION:

"On January 20, 1999, SCI began to install the proposed 600mm Water Main (600WM) per the contract documents. Following standard water main construction, SCI installed a 600mm Butterfly Valve (600BV) at station 154+40 and another 600BV at station 150+13. After these valves were set, the City of Kissimmee (COK) began asking questions regarding the pigging of this new water main. SCI stated that this main would not be pigged, due to the fact that butterfly valves were specified. Industry common practice is that when butterfly valves are specified, the main cannot be pigged and therefore pigging is not required. In cases where these valves are specified, the main is simply thoroughly flushed (full-bore flush).

Then, the City demanded that the main be pigged and that a sleeve would be required at each of the butterfly valve locations. SCI was forced to then remove the two previously placed valves and replace them with sleeves. An additional sleeve was required at station 145+39 for another future 600BV.

The 600WM was later pigged from station 159+80 to station 144+20. This required extra equipment & manpower, pipe and fittings at the discharge point. To-date SCI has not requested compensation for this unforeseen work. SCI was then forced to go back to remove the sleeves and re-install the valves at their respective locations (station 154+40, station 150+13 and station 145+39).

During, the construction of the remainder of the 600WM, SCI installed eight (8) more sleeves for the future 600BV installations. The main was then pigged from station 128+60 to station 144+00. Again, compensation for the unforeseen costs for the pigging operation was not requested by SCI.

In summary, it is widely known that when Butterfly Valves are specified, pigging of the water main cannot and will not be required. At the time of bid SCI planned to full-bore flush the main from one end to the other. Therefore, SCI is due compensation for the unforeseen costs to pig the 600WM.

TIME:

From the previous explanations in the "Entitlement" portion of these papers, it is evident that SCI spent an exorbitant amount of unforeseen time to perform these pigging operations on the 600WM. SCI has previously only requested fourteen (14) contract days and the appropriate overhead costs for this major change in the scope of the work. However, this unforeseen work has postponed the completion of this project much more than fourteen days.

Due to the fact that SCI was forced to construct the main with sleeves in lieu of the required butterfly valves, SCI pipe crews were pulled away from the completion of critical path activities. These crews should have been working on the storm drainage work, instead they had to go back and re-install valves.

As a result of this unforeseen change in scope, the project completion was delayed.

Therefore, SCI must be compensated time and overhead costs."

DEPARTMENT'S REBUTTAL:

- "1. Paragraph 1. Sentence 3: The pigging issue was raised after the first butterfly valve was set and before the second one was set. It had to be pointed out to SCI that the **Technical Specifications called for the line to be pigged.** (See GAI-SE Position Papers Page 27)
- 2. Paragraph 1, Sentence 4: FDOT checked with another project, in this same vicinity, that had butterfly valves and where pigging was required by a different utility owner. The FDOT was told that the contractor pigged through the butterfly valves with a special pig
- 3. Paragraph 2, Sentence 1: The City of Kissimmee required the line to be pigged as stated in the Technical Specifications. However, **SCI elected to place sleeves in the line as their method to pig the line**. (See GAI-SE Position Papers Page 17)
- 4. Paragraph 2, Sentence 2: No one forced SCI to remove the valves that were placed. In fact, the City of Kissimmee gave SCI permission to full bore flush this section of pipe, with stipulations. (See GAI-SE Position Papers Page 13)
- 5. Paragraph 5, Sentence 2: The City of Kissimmee contends that at the time of the bid SCI's plans conflicted with the COK's Specifications. If this was a problem and SCI was aware of the Specifications, then the question must be asked: Why was it not brought up in the weekly meetings or addressed in an RFI before the work began?

Time Issue:

- 1. Paragraph 1, Sentence 2: SCI's only request for time on this issue was twelve (12) contract days, not the fourteen days stated, which has been denied from the beginning due to the fact that this issue cannot be considered a major change in the scope of the work when the specifications define what work is to be accomplished. (See GAI-SE Position Papers Page 34 and 37)
- 2. Paragraph 2, Sentence 2: We do not agree that SCI was "FORCED" to construct the main with sleeves, but contend this was the method chosen by SCI to comply with the stipulations placed by the COK on SCI's request.

In Summarization:

We do not agree that the pigging of the 600mm water main constitutes an unforeseen change in scope. We do know that the Technical Specifications are a part of the contract and the documents do not dictate the way or the means that the contractor chooses to use in order to accomplish the task. This is the reason for competitive bidding."

CONTRACTOR'S REBUTTAL:

The Contractor did not present the Board a written rebuttal.

BOARD FINDINGS:

The Project Contract incorporates the Technical Special Provisions for the City of Kissimmee, which under Section 3100 – UTILITY MATERIALS state in part on page 38 of 47:

3100-5 Measurement and Payment.

No separate payment will be made for the following items:

- Sheeting and shoring.
- Dewatering, trench excavation, fill, backfill and grading, sheeting and shoring.
- Maintenance of Existing utilities.
- 4. Curb removal and replacement.
- 5. Clearing and grubbing outside right-of-way and within easements.
- 6. Connection to existing utilities.
- 7. Startup of pump stations.
- 8. Flushing, pigging, disinfection and testing including all materials and

3100

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and continues on the following page:

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equipment.

- 9. Field verification or location of buried utilities.
- 10. Removal and replacement of fencing and other structures.
- 11. Record drawing.
- 12. All required licenses, fees, permits and inspections unless specifically stated elsewhere in these specifications.

Section 3600 – WATER MAIN AND SERVICE states in part:

3600-4.2 Pigging and Flushing: After the mains have been laid, each run of pipe shalls be pigged and thoroughly flushed so as to remove all debris and foreign matter from the lines. Flushing will ordinarily be done by full bore blow off at the end of each run of pipe. Piping shall be provided by the Contractor to waste the water to the nearest disposal point. The duration of flushing will vary with the length of line and the pipe diameter. The objective of flushing is to "change the water" in the new line a minimum of six times, at a minimum 0.61 meters per second velocity. Flushing must be coordinated with the Water Utility at least 48 hours prior to commencement.

3600

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- Other Contractors have been required to "pig" similar lines.
- Smith admitted that it had checked with a specialty subcontractor regarding "pigging" the lines after construction began and determined that the lines could be "pigged", but that it was prohibitively expensive. Smith believed that it would be permissible to full-bore flush the lines in lieu of "pigging".
- There are methods of "pigging" the line.
- Prior to the bid, the Contractor failed to inquire of the Owner if a variance to the specifications regarding "pigging" would be allowed. If the Contractor believed that full-bore flushing of the line would be permissible, he should have

contacted the Owner prior to submitting his bid and documented the allowed variance to the specifications.

Indeed the Special Provisions provide a mechanism for the Contractor to do so:

ARTICLE 2-4 (Page 9) is expanded by the following:

All questions prior to letting should be directed to or through Bill Downs, District Construction Engineer. The District Construction Engineer may be contacted at the District Five Office. Phone Number 904-943-5344.

- Although the Board feels that the response given "might" have been for the Contractor to "bid it like he sees it", there was no information presented to the Board that would have or could have created an ongoing precedence to waive "pigging" on this Contract.
- The Contractually specified requirement to "pig" the water line is clear and unambiguous.

BOARD RECOMMENDATION:

Based on the materials supplied to the Board and presentations to the Board at the DRB hearing the Board finds no entitlement to the Contractor's position.

This Board sincerely appreciates the cooperation of all parties and the information presented for its review in making this recommendation.

Please remember that a response to the DRB and the other party of your acceptance or rejection of this recommendation is required within 15 days. Failure to respond constitutes an acceptance of this recommendation by both parties.

I certify that I have participated in all of the meetings of this DRB regarding Issue No. 1 and concur with the findings and recommendations.

Respectfully Submitted

Disputes Review Board

John H. Duke, Sr.; DRB Chairman Bobby D. Buser, P.E.; DRB Member E. K. Richardson, P.E.; DRB Member

SIGNED FOR AND WITH THE CONCURRENCE OF ALL MEMBERS:

John H. Duke, Sr.; DRB Chairman